

ENGINEERING ASSOCIATE I - ELECTRICAL
ENGINEERING ASSOCIATE II - ELECTRICAL

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are **not** intended to reflect all duties performed within the job.*

DEFINITION

To perform a variety of tasks involved in upgrading and developing electrical systems in city-owned facilities including buildings, street and park lighting, traffic signals and the wastewater treatment plant; to research and coordinate projects and activities with other departments; and to perform technical tasks relative to assigned areas of responsibility.

DISTINGUISHING CHARACTERISTICS

Engineering Associate I--This is the entry level class in the Engineering Associate series. This class is distinguished from the Engineer Associate II by the performance of the more routine tasks and duties assigned to positions within the series including work on smaller projects, performed under direct supervision. Since this class is typically used as a training class, employees may have only limited or no directly related work experience.

Engineering Associate II--This is the full journey level class within the Engineering Associate series. Employees within this class are distinguished from the Engineering Associate I by the performance of the full range of duties as assigned including conducting independent plan reviews and reviewing complex construction drawings in the design phase. Employees at this level receive only occasional instruction or assistance as new or unusual situations arise, and are fully aware of the operating procedures and policies of the work unit.

SUPERVISION RECEIVED AND EXERCISED

Engineering Associate I

Receives direct supervision from higher level staff.

Engineering Associate II

Receives general supervision from higher level staff.

May exercise functional and technical supervision over engineering staff.

CITY OF LAS VEGAS
Engineering Associate I/II - Electrical (Continued)

ESSENTIAL AND MARGINAL FUNCTION STATEMENTS--*Essential and other important responsibilities and duties may include, but are not limited to, the following:*

Essential Functions:

1. Prepare electrical designs, cost estimates and specifications for upgrades of lighting and power systems; coordinate projects with other offices and prepare design and construction schedules; develop and monitor design and construction budgets.
2. Evaluate utility cost and consumption data and recommend energy savings programs and hardware.
3. Oversee the establishment of a preventive maintenance program for city-owned electrical systems and plan and design projects to improve electrical system reliability.
4. Evaluate power requirements and system capabilities for proposals to establish new functions and associated hardware, such as new computer systems.
5. Review electrical plans and specifications submitted by contractors in the design phase for new and upgraded city electrical systems.
6. Provide support for computer and communications upgrades.

Marginal Functions:

1. Maintain records and files on agreements and other documentation.
2. Prepare accurate electrical as-built drawings of lighting, power and emergency power systems using autocad.
3. May conduct on-site inspections.
4. Perform related duties and responsibilities as required.

QUALIFICATIONS

Engineering Associate I

Knowledge of:

General electrical engineering principles and practices.
Construction practices and terminology.
Materials, tools and equipment used in electrical engineering.
Principles of mathematics as applied to electrical engineering work.
Current electrical building codes.
Current electrical technology and hardware.
Modern office procedures, methods and computer equipment.

CITY OF LAS VEGAS
Engineering Associate I/II - Electrical (*Continued*)

Ability to:

Learn to review electrical engineering plans and specifications.

Learn pertinent federal, state and local laws, codes and regulations including electrical engineering laws and regulations.

Prepare electrical engineering drawings using autocad.

Prepare and maintain technical engineering records and prepare reports.

Operate computer equipment.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain cooperative working relationships with those contacted in the course of work.

Maintain mental capacity which allows for effective interaction and communication with others.

Maintain effective audio-visual discrimination and perception needed for:

- *Making observations*
- *Communicating with others*
- *Reading and writing*
- *Operating assigned equipment.*

Experience and Training Requirements

Experience:

No previous experience is required.

Training:

Equivalent to a Bachelor's degree from an accredited college or university with major course work in electrical engineering- or a related field.

Engineering Associate II

In addition to the qualifications for Engineering Associate I:

Knowledge of:

Pertinent federal, state and local laws, codes and regulations including electrical-engineering laws and regulations.

Ability to:

Review and recommend modifications to electrical engineering plans and specifications.

Perform technical research on electrical engineering problems.

CITY OF LAS VEGAS
Engineering Associate I/II - Electrical (*Continued*)

Experience and Training Requirements

Experience:

Two years of electrical engineering experience.

Training:

Equivalent to a Bachelor's degree from an accredited college or university with major course work in electrical engineering or a related field.

WORKING CONDITIONS

Environmental Conditions:

Office and field environment; exposure to computer screens, dust, high voltage and electrical energy.

Physical Conditions:

Essential and marginal functions may require maintaining physical condition necessary for sitting and standing for prolonged periods of time.

ARB
NEW 5/23/96
FLSA & City: nonexempt

CSB 7/10/96